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COMMUNITIES IN THE DARK: THE USE OF STATE SUNSHINE LAWS TO SHED LIGHT ON THE FRACKING INDUSTRY

KELLIE FISHER*

Abstract: Although oil and gas companies continue to maintain that fracking is safe and there is no risk of injury, personal accounts from residents of areas with a fracking industry presence suggest otherwise. Oil and gas companies utilize a variety of mechanisms to ensure secrecy within the industry. Through gaps in federal regulation, the classification of fracking fluid as a trade secret, sealed settlements, and confidentiality orders imposed on people injured by fracking, access to information about the industry—including chemicals used and harm to residents—is minimal. This Note argues that the implementation of state sunshine laws is one possible mechanism to shine light on the practices of the fracking industry in order to encourage more governmental monitoring, expose the risks, and provide possible recourse for injured parties to recover in a toxic tort suit.

INTRODUCTION

When owners of property that sits on a shale formation are approached by oil and gas companies offering large amounts of money in exchange for rights to the land, the money can be tempting—especially in rural areas where people live at or near the poverty line.¹ These companies make claims to residents, the media, and the government that hydraulic fracturing, or “fracking” is safe, and that no harm will result from the fast-growing practice.² Despite claims of safety and resultant wealth, numerous persons who allowed the oil and gas industry to have access to their land have reported negative health effects and property damage.³

* Managing Editor, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, 2014–2015.

¹ See Eliza Griswold, *Situation Normal All Fracked Up*, N.Y. TIMES MAG., Nov. 20, 2011, at SS1–46, available at http://www.nytimes.com/2011/11/20/magazine/fracking-amwell-township.html?pagewanted=all&_r=0, archived at <http://perma.cc/3F49-PUZU>.

² Ian Urbina, *A Tainted Water Well, and Concern There May be More*, N.Y. TIMES, Aug. 4, 2011, at A13, available at http://www.nytimes.com/2011/08/04/us/04natgas.html?pagewanted=all&_r=0, archived at <http://perma.cc/N25J-5TCE>; Jim Efstathiou Jr. & Mark Drajem, *Drillers Silence Fracking Claims With Sealed Settlements*, BLOOMBERG (Jun. 6, 2013, 12:00 AM), <http://www.bloomberg.com/news/2013-06-06/drillers-silence-fracking-claims-with-sealed-settlements.html>, archived at <http://perma.cc/JUG7-J9Q2>.

³ See Griswold, *supra* note 1, at SS1–47; Efstathiou & Drajem, *supra* note 2; Jim Morris et al., *Big Oil and Bad Air*, WEATHER CHANNEL (Feb. 18, 2014), <http://stories.weather.com/fracking>

Although reports of injured persons are numerous, and several popular documentaries showcasing the dangers of fracking have been released,⁴ there is still very little governmental regulation of fracking and no requirement for thorough industry monitoring.⁵ Oil and gas companies protect their claims of safety by arguing that many of the chemicals used in fracking operations are trade secrets, and therefore, that they cannot be compelled to disclose them to the public, the media, the government, or watchdog groups.⁶ Furthermore, most complaints from residents injured by fracking result in secret, out of court settlement agreements, which impose lifetime orders of confidentiality on those injured.⁷ Despite evidence of its harmful effects on public health, the oil and gas industry has thus far insulated itself from regulation and continues to claim that fracking is a safe practice that does not require governmental monitoring or federal oversight.⁸

This Note examines the secrecy surrounding the fracking industry, and explores a possible method for shining more light on the industry and its practices.⁹ Although it is unrealistic to anticipate full transparency in the fracking industry, or to expect that trade secrets and secret contractual settlements will not continue to be utilized, state sunshine laws may be used to create greater awareness of the risks associated with fracking for property owners considering whether to allow oil and gas companies to drill on their property.¹⁰ Furthermore, increased access to information about fracking and

(story published in conjunction with the release of an eight-month investigative documentary), archived at <http://perma.cc/SE2P-YUQM>; Weather Channel, InsideClimate News & The Center for Public Integrity, *Fracking The Eagle Ford Shale: Big Oil And Bad Air On The Texas Prairie*, WEATHER CHANNEL, <http://stories.weather.com/fracking> (last visited Oct. 3, 2014), archived at <http://perma.cc/SE2P-YUQM>.

⁴ FRACKNATION (Ann and Phelim Media 2013); GASLAND (New Video Group Jan. 24, 2010).

⁵ See Clean Water Act National Pollutant Discharge Elimination System, 33 U.S.C. § 1342(l) (2012); Safe Drinking Water Act of 1974, 42 U.S.C. § 300h(d)(1)(B) (2012); Griswold, *supra* note 1, at SS1–49; FRACKNATION, *supra* note 4; GASLAND, *supra* note 4.

⁶ Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm'n, No. 94650, 2013 WL 8718518, at *1 (Wyo. Dist. Ct. Mar. 21, 2013), *rev'd* 320 P.3d 222 (Wyo. 2014); Ben Elgin et al., *Fracking Secrets by Thousands Keep U.S. Clueless on Wells*, BLOOMBERG (Nov. 30, 2012, 12:01 AM), <http://www.bloomberg.com/news/2012-11-30/frack-secrets-by-thousands-keep-u-s-clueless-on-wells.html>, archived at <http://perma.cc/79K8-NWST>.

⁷ Efstathiou & Drajem, *supra* note 2.

⁸ See 33 U.S.C. § 1342(l); 42 U.S.C. § 300h(d)(1)(B); Efstathiou & Drajem, *supra* note 2.

⁹ See ARK. CODE ANN. § 16-55-122 (West 2010); TEX. R. CIV. P. 76(a); Efstathiou & Drajem, *supra* note 2; *infra* notes 86–300 and accompanying text.

¹⁰ See Griswold, *supra* note 1, at SS1–46; *Energy: The Pros and Cons of Shale Gas Drilling*, CBS NEWS (Nov. 12, 2010), <http://www.cbsnews.com/news/energy-the-pros-and-cons-of-shale-gas-drilling-12-11-2010/>, archived at <http://perma.cc/H3QW-K9Q2>.

the associated risks give plaintiffs greater opportunities for success in tort suits against oil and gas companies.¹¹

Part I of this Note describes the process of hydraulic fracturing, as well as the health and environmental implications of the industry.¹² It also explores the lack of federal regulation of fracking.¹³ Part II describes current trade secret laws and the use of trade secret laws by the oil and gas industry to keep chemicals used in fracking a secret.¹⁴ Part III examines how litigation against the oil and gas industry proceeds and the orders of confidentiality imposed on plaintiffs.¹⁵ Part IV describes several state sunshine laws enacted to unseal settlement agreements that hide information that is harmful to human health or the environment.¹⁶ Part V discusses the problems associated with secrecy surrounding the fracking industry.¹⁷ Finally, this Note explores the possibility of using state sunshine laws to allow citizens greater access to information about the fracking industry.¹⁸

I. THE MECHANICS, EFFECTS, AND REGULATION OF HYDRAULIC FRACTURING

A. Mechanisms of Hydraulic Fracturing

Hydraulic fracturing—commonly known as “fracing,” “fracking,” or “hydrofracking”—is the process of extracting natural gas from deep underground, which is trapped under shale formations.¹⁹ Fracking involves drilling a hole into the ground and injecting a combination of fluids and chemicals into the shale.²⁰ The pressure of the fluid causes the shale to fracture, and the fracture grows in the direction of the least resistance, releasing the natural gas.²¹

¹¹ See Keith B. Hall, *Hydraulic Fracturing Contamination Claims: Problems of Proof*, 74 OHIO ST. L.J. FURTHERMORE, 71, 74 (2013), available at http://moritzlaw.osu.edu/students/groups/oslj/files/2013/06/Furthermore.Hall_.pdf.

¹² See *infra* notes 19–62 and accompanying text.

¹³ See *infra* notes 63–85 and accompanying text.

¹⁴ See *infra* notes 86–123 and accompanying text.

¹⁵ See *infra* notes 124–201 and accompanying text.

¹⁶ See *infra* notes 203–27 and accompanying text.

¹⁷ See *infra* notes 227–65 and accompanying text.

¹⁸ See *infra* notes 266–314 and accompanying text.

¹⁹ Hannah Wiseman, *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, 57 ADVOC. (Tex.) 8, 8 (2011). Shale is “a fissile rock that is formed by the consolidation of clay, mud, or silt, has a finely stratified or laminated structure, and is composed of minerals essentially unaltered since deposition.” MERRIAM-WEBSTER DICTIONARY 1072 (10th ed. 2001).

²⁰ ERLING FJAR ET AL., PETROLEUM RELATED ROCK MECHANICS 369 (Elsevier B.V., 2nd ed. 2008); *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8.

²¹ FJAR ET AL., *supra* note 20, at 369.

The oil and gas industry has used fracking to extract minerals from rock formations since the late 1940s.²² Drilling for natural gas began as a vertical process, during which wells were dug straight into the ground, and gas would be extracted.²³ With recent advances in technology however, natural gas extraction has moved toward a directional drilling method.²⁴ Directional drilling is the process of drilling a curved well that can reach gas targets that are not directly beneath the drill site.²⁵ It is useful if the area with natural gas is inaccessible from a vertical well bore.²⁶

In the 1990s, companies developed a new fracking technique that is referred to as “slickwater.”²⁷ The slickwater process has resulted in the development of many more wells—including many in areas that previously had little oil and gas production—and it lowered the cost of fracking.²⁸ For example, in 2008, Pennsylvania well operators drilled and fractured 195 wells into the Marcellus Shale formation.²⁹ By 2010, Pennsylvania had 1386 wells.³⁰ Between 2005 and 2013, approximately 82,000 wells were drilled in the United States, and approximately 11,400 new wells are fracked each year.³¹

²² See Keith B. Hall & Lauren E. Godshall, *Hydraulic Fracturing Litigation*, 57 *ADVOC. (Tex.)* 13, 13 (2011).

²³ Susan L. Brantley & Anna Meyendorff, Op-Ed., *The Facts on Fracking*, *INT’L HERALD TRIB.* (Mar. 14, 2013), <http://www.nytimes.com/2013/03/14/opinion/global/the-facts-on-fracking.html>, archived at <http://perma.cc/U263-9LZH>.

²⁴ *Id.*

²⁵ Hobart King, *Directional and Horizontal Drilling in Oil and Gas Wells*, *GEOLOGY.COM*, <http://geology.com/articles/horizontal-drilling/> (last visited Oct. 3, 2014), archived at <http://perma.cc/Z9Q2-TNKS>.

²⁶ Brantley & Meyendorff, *supra* note 23; King, *supra* note 25. This allows oil and gas companies to reach natural gas under land on which the owner has not granted access to the surface rights, but where the company owns mineral rights, or when a natural gas reservoir is located under an area where drilling is forbidden or impossible. King, *supra* note 25; see *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8.

²⁷ *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8. The name slickwater is a reference to a type of fracking fluid that is used to reduce friction, which speeds delivery of the fluid—often called “slurry”—to the natural gas target. See *Slick Water Solutions*, *GOFRACT*, <http://www.gofrac.com/services/slick-water.html> (last visited Oct. 11, 2014), archived at <http://perma.cc/WAX-3L3S>.

²⁸ *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8.

²⁹ *Id.* The “Marcellus Shale is a sedimentary rock buried thousands of feet beneath the earth’s surface . . .” that “stretches from upstate New York south through Pennsylvania to West Virginia and west to parts of Ohio.” *The Marcellus Shale, Explained*, *STATEIMPACT*, <http://stateimpact.npr.org/pennsylvania/tag/marcellus-shale/> (last visited Oct. 11, 2014), archived at <http://perma.cc/KS8C-L773>.

³⁰ *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8.

³¹ ELIZABETH RIDLINGTON & JOHN RUMPLER, *ENV’T AM. RESEARCH & POLICY CTR., FRACKING BY THE NUMBERS 4* (2013), available at <http://www.environmentamerica.org/sites/>

The slickwater fracking process has four stages.³² The process begins after the operator has drilled, cased, and cemented an L-shaped wellbore along a shale formation.³³ In the first stage—referred to as the acid stage—the operator uses several thousand gallons of water mixed with fifteen percent hydrochloric acid to clear openings in the casing and dissolve impurities, such as cement and debris.³⁴ In the second stage—referred to as the pad stage—operators inject large volumes of fracking fluid into the wellbore under high pressure, creating fractures along the shale that allow natural gas to escape from the shale formation.³⁵ The fracking process typically requires between two and eight million gallons of slickwater fracking fluid.³⁶ Ninety-nine percent of the fracking fluid is comprised of water and propping agents such as sand and the remaining one percent of the fluid is comprised of chemical additives.³⁷ The third stage—referred to as the proppant stage—uses propping agents to hold open the fractures created along the shale.³⁸ The fourth and final stage clears excess propping agents from the wellbore by flushing it with water.³⁹ After this section of the well is fracked, the area is plugged and the process is repeated between four and twenty times on each section of the well.⁴⁰

After all of the sections of the well are fracked, the plugs of the well are drilled out, causing a surge of pressurized natural gas that spews out large amounts of fracking fluids and additives.⁴¹ Approximately twenty to forty percent of the injected fluids flow back to the surface, while the rest

environment/files/reports/EA_FrackingNumbers_scrn.pdf, archived at <http://perma.cc/YV4W-H9TF>; Rachel Ehrenberg, *The Facts Behind the Frack*, SCI. NEWS, Sept. 8, 2012, at 20, 21.

³² ANDREA RAMUDO & SEAN MURPHY, CORNELL UNIV. CITY & REG'L PLANNING, HYDRAULIC FRACTURING—EFFECTS ON WATER QUALITY 7–8 (2010), available at http://www.cce.cornell.edu/EnergyClimateChange/NaturalGasDev/Documents/City%20and%20Regional%20Planning%20Student%20Papers/CRP5072_Water%20Quality%20Final%20Report.pdf, archived at <http://perma.cc/X2AW-H36L>; *Hydraulic Fracturing: The Process*, FRACFOCUS CHEM. DISCLOSURE REGISTRY, <http://fracfocus.org/hydraulic-fracturing-how-it-works/hydraulic-fracturing-process> (last visited Oct. 3, 2014), archived at <http://perma.cc/E532-H8GU>.

³³ Kaoru Suzuki, Note, *The Role of Nuisance in the Developing Common Law of Hydraulic Fracturing*, 41 B.C. ENVTL. AFF. L. REV. 265, 268 (2014); *Hydraulic Fracturing: The Process*, *supra* note 32.

³⁴ RAMUDO & MURPHY, *supra* note 32, at 7; Suzuki, *supra* note 33, at 268; *Hydraulic Fracturing: The Process*, *supra* note 32.

³⁵ *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 8; Suzuki, *supra* note 33, at 268.

³⁶ Suzuki, *supra* note 33, at 269; Ehrenberg, *supra* note 31, at 24.

³⁷ Ehrenberg, *supra* note 31, at 24; *What Chemicals Are Used*, FRACFOCUS CHEM. DISCLOSURE REGISTRY, <http://fracfocus.org/chemical-use/what-chemicals-are-used> (last visited Oct. 3, 2014), archived at <http://perma.cc/D3AQ-HQ4C>.

³⁸ *Hydraulic Fracturing: The Process*, *supra* note 32.

³⁹ *Id.*

⁴⁰ RAMUDO & MURPHY, *supra* note 32, at 8; Suzuki, *supra* note 33, at 268.

⁴¹ RAMUDO & MURPHY, *supra* note 32, at 9.

remains underground.⁴² After the process is complete, the fracking water—known as flowback—is recovered.⁴³ Flowback includes water, the chemicals and additives used to break up the shale, and substances from the dissolved rock.⁴⁴ The flowback is either collected and transferred to on-site steel holding tanks or transport trucks for off-site storage,⁴⁵ or it is injected back into the ground for storage.⁴⁶

B. Environmental and Health Concerns

Concern for human health and the environment surrounds the fracking industry.⁴⁷ The industry and the government have received numerous complaints from citizens concerned about the safety of their drinking water and potential contamination of their underground water supply due to nearby fracking operations.⁴⁸ Documentaries show tap-water discoloration, the emission of unnatural odors, and flammable water in regions of the country in which fracking is an established industry.⁴⁹ Of the more than 750 known chemicals used in fracking, more than 100 are either known or suspected endocrine disrupters, and others are known or suspected toxins or carcinogens.⁵⁰ Health complaints from people who live near fracking wells include headaches, nosebleeds, stomach pain, and extreme fatigue.⁵¹ Some who experienced such effects have tested positive for exposure to harmful chemicals known to be commonly used in fracking.⁵²

⁴² Barry Stevens, *The Facts About Fracking Fluid and its Disposal*, OILPRICE.COM (May 23, 2012, 10:12 PM), <http://oilprice.com/Energy-General/The-Facts-about-Fracking-Fluid-and-its-Disposal.html>, archived at <http://perma.cc/428R-P4YP>.

⁴³ RAMUDO & MURPHY, *supra* note 32, at 9.

⁴⁴ *Id.*

⁴⁵ *Id.* Most companies transport the fracking fluid to a deep injection well, a wastewater treatment plant, or a privately owned and operated recycling facility. Suzuki, *supra* note 33, at 268 n.35.

⁴⁶ RAMUDO & MURPHY, *supra* note 32, at 9; Suzuki, *supra* note 33, at 268 n.35.

⁴⁷ See Griswold, *supra* note 1, at SS1–49; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

⁴⁸ See Griswold, *supra* note 1, at SS1–49; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

⁴⁹ FRACKNATION, *supra* note 4; GASLAND, *supra* note 4.

⁵⁰ Christopher D. Kassotis et al., *Estrogen and Androgen Receptor Activities of Hydraulic Fracturing Chemicals and Surface and Ground Water in a Drilling-Dense Region*, 155 *ENDOCRINOLOGY* 897, 898 (2013). An endocrine disruptor is a chemical that mimics or blocks hormones and disrupts the body's normal functions, affecting growth, development, and the way organs operate. *Endocrine Disruptors*, NATURAL RES. DEF. COUNCIL, <http://www.nrdc.org/health/effects/qendoc.asp> (last visited Oct. 3, 2014), archived at <http://perma.cc/G4TC-3PUK>.

⁵¹ Griswold, *supra* note 1, at SS1–49; Efstathiou & Drajem, *supra* note 2.

⁵² Griswold, *supra* note 1, at SS1–49. Stacey Haney and her children, who live in western Pennsylvania, complained about health problems after leasing their land to an oil company. *Id.* After suffering from poor health, she and her children were tested and doctors found elevated levels of arsenic, benzene, and toluene in their blood. *Id.*

Property owners who have agreed to allow oil and gas companies to frack their land have also reported deaths of household pets and farm animals.⁵³ Examinations of the dead animals showed high levels of toxins in their blood and livers.⁵⁴ A 2012 study found dozens of cases of illness, death, and reproductive issues in cows, horses, goats, llamas, chickens, dogs, cats, fish, and other wildlife, after exposure to fracking fluid.⁵⁵

Fracking also significantly affects air quality.⁵⁶ Chemicals released during oil and gas extraction include hydrogen sulfide, volatile organic compounds (“VOCs”) including benzene and sulfur dioxide, particulate matter, carbon monoxide, and carbon disulfide.⁵⁷ The chemicals create terrible smells near wells.⁵⁸ Reported health effects resulting from contaminated air near natural gas wells include asthma, nausea, migraines, and temporary blindness.⁵⁹

In 2004, the Environmental Protection Agency (EPA) deemed the environmental and health effects of hydraulic fracturing to be insignificant, but the EPA reopened its investigation in 2011 after a request from Congress.⁶⁰ Internal documents suggest that the EPA is facing significant pressure from the oil and gas industry to narrow the scope of the study.⁶¹ The EPA expects to issue its final report in 2014.⁶²

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Krishna Ramanujan, *Reproductive Problems, Death in Animals Exposed to Fracking*, CORNELL CHRON. (Mar. 7, 2012), <http://www.news.cornell.edu/stories/2012/03/reproductive-problems-death-animals-exposed-fracking>, archived at <http://perma.cc/69Y3-YDDT>.

⁵⁶ Morris et al., *supra* note 3.

⁵⁷ *Id.* Benzene is a known carcinogen, and VOCs mix with nitrogen oxide emitted from field equipment to create ozone, a major respiratory hazard. *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ U.S. ENVTL. PROT. AGENCY, EVALUATION OF IMPACTS TO UNDERGROUND SOURCES OF DRINKING WATER BY HYDRAULIC FRACTURING OF COALBED METHANE RESERVOIRS STUDY 7–5 (2004) [hereinafter 2004 REPORT], available at http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_coalbedmethanestudy.cfm, archived at <http://perma.cc/3EQV-KSAZ>; U.S. ENVTL. PROT. AGENCY, STUDY OF THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES: PROGRESS REPORT 5 (2012) [hereinafter 2012 REPORT], available at <http://www2.epa.gov/sites/production/files/documents/hf-report20121214.pdf>, archived at <http://perma.cc/L6HW-VZZU>; Hannah Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation*, 20 FORDHAM ENVTL. L. REV. 115, 128 (2009).

⁶¹ Ian Urbina, *Pressure Limits Efforts to Police Drilling for Gas*, N.Y. TIMES, Mar. 4, 2011, A1, available at <http://www.nytimes.com/2011/03/04/us/04gas.html?pagewanted=all>, archived at <http://perma.cc/4UV2-FQ4M>.

⁶² *Questions and Answers About EPA’s Hydraulic Fracturing Study*, U.S. ENVTL. PROT. AGENCY, <http://www2.epa.gov/hfstudy/questions-and-answers-about-epas-hydraulic-fracturing-study#25> (last updated Sept. 8, 2014), archived at <http://perma.cc/YX4A-6R2J>. The EPA stated that the results of the study might be used to “inform the public and decision makers about potential impacts of hydraulic fracturing on drinking water resources and support future research.” *Id.*

C. Regulatory Treatment of the Fracking Industry

After the slickwater fracking process significantly lowered the cost of fracking, the extraction process became a significant point of discussion for those looking to provide a boost to the national economy.⁶³ Proponents of fracking argue that the practice increases energy independence, raises revenue for the country, and creates millions of jobs.⁶⁴ Energy independence is an increasingly important political issue in the wake of increasing turmoil in the Middle East, and disasters such as the disintegration of the Fukushima nuclear fuel reactors in Japan.⁶⁵ All of these political factors have combined to prevent increased federal and state regulation of the fracking industry.⁶⁶

There are not only no new fracking regulations, but fracking is also exempt from many federal statutes, which allows the industry to shroud itself in secrecy.⁶⁷ The Energy Policy Act of 2005 (the “Energy Policy Act”) for example, exempts fracking from the water use requirements established by the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA).⁶⁸ The purpose of the Energy Policy Act is to ensure the creation and maintenance of jobs in the United States.⁶⁹ In it, Congress inserted loopholes in federal environmental laws to exempt oil and gas companies from significant regulation.⁷⁰ These exemptions are known as the Halliburton Loophole.⁷¹

⁶³ See JOHN W. LARSON ET AL., INFO. HANDLING SERV., AMERICA’S NEW ENERGY FUTURE: THE UNCONVENTIONAL OIL AND GAS REVOLUTION AND THE US ECONOMY, VOLUME 1: NATIONAL ECONOMIC CONTRIBUTORS, at vii (2012); Bjørn Lomborg, *A Fracking Good Story*, PROJECT SYNDICATE (Sept. 15, 2012, 6:30 AM), http://www.slate.com/articles/health_and_science/project_syndicate/2012/09/thanks_to_fracking_u_s_carbon_emissions_are_at_the_lowest_levels_in_20_years_html, archived at <http://perma.cc/F78F-3VVB>.

⁶⁴ LARSON ET AL., *supra* note 63, at vii; Charles Davis, *The Politics of “Fracking”: Regulating Natural Gas Drilling Practices in Colorado and Texas*, 29 REV. OF POL’Y RES. 177, 180 (2012).

⁶⁵ See Davis, *supra* note 64, at 180.

⁶⁶ See 33 U.S.C. § 1342(l) (2012); 42 U.S.C. § 300h-4 (2012); Davis, *supra* note 64, at 182.

⁶⁷ See 33 U.S.C. § 1342(l); 42 U.S.C. § 300h-4; Griswold, *supra* note 1, at SS1–49.

⁶⁸ See 33 U.S.C. § 1342(l); 42 U.S.C. § 300h-4.

⁶⁹ See Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (codified at 42 U.S.C. §§ 15801–16524 (2012)). The preamble of the Act states that it was enacted “to ensure jobs for our future with secure, affordable, and reliable energy.” *Id.*

⁷⁰ Suzuki, *supra* note 33, at 273; see 33 U.S.C. § 1342(l); 42 U.S.C. § 300h-4.

⁷¹ Hannah Coman, Note, *Balancing the Need for Energy and Clean Water: The Case for Applying Strict Liability in Hydraulic Fracturing Suits*, 39 B.C. ENVTL. AFF. L. REV. 131, 138–39 (2012); Energy: *The Pros and Cons of Shale Gas Drilling*, *supra* note 10. Exemption from regulation is referred to as the Halliburton Loophole because Halliburton is a leading fracking company. *Id.* Furthermore, former Vice President Dick Cheney—once a Halliburton executive—was instrumental in passing the Energy Policy Act of 2005. Susan Phillips, *Burning Question: What Would Life Be Like Without the Halliburton Loophole?*, STATEIMPACT (Dec. 5, 2011, 12:00 PM), <http://stateimpact.npr.org/pennsylvania/2011/12/05/burning-question-what-would-life-be-like-without-the-halliburton-loophole/>, archived at <http://perma.cc/4J4E-MQ2H>. Cheney was the chair of the

The first exemption was inserted into the CWA, which regulates discharges of pollutants into U.S. water sources and protects the surface waters of the United States.⁷² The CWA defines a pollutant as, among other things, dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, and radioactive materials.⁷³ It states, however, that:

Pollutant, with respect to the CWA, does not mean water, gas, or other material that is injected into a well to facilitate the production of oil and gas, or water derived in association with oil or gas production and disposed of in a well, if the well-used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.⁷⁴

The second exemption was inserted into the SDWA, which Congress enacted to protect the quality of drinking water throughout the United States.⁷⁵ Although threats to drinking water are usually covered by the SDWA, its statutory definition of “underground injections” expressly excludes fracking, and thus shields the practice from regulation.⁷⁶ This exemption is codified in the Energy Policy Act.⁷⁷

Finally, the third exemption applies to flowback, which includes water, chemicals, radioactive waste, and other natural materials, from the Resource Conservation and Recovery Act (RCRA).⁷⁸ RCRA, which primarily serves to manage the disposal of solid and hazardous waste, was amended in 1980 to create an exemption for waste created through the production and devel-

Energy Policy Task Force, which made the recommendation that fracking be excluded from regulation under the CWA and the SDWA. *Id.*

⁷² See 33 U.S.C. § 1251 (2012).

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ EARTHWORKS & OIL & GAS ACCOUNTABILITY PROJECT, THE OIL AND GAS INDUSTRY’S EXCLUSIONS AND EXEMPTIONS TO MAJOR ENVIRONMENTAL STATUTES 8 (2007), available at http://www.shalegas.energy.gov/resources/060211_earthworks_petroleumexemptions.pdf, archived at <http://perma.cc/XY4J-UG7Q>.

⁷⁶ 42 U.S.C. § 300h-4 (2012).

⁷⁷ See *id.* The Energy Policy Act states that fracking operations are completely exempt under the SDWA and releases the EPA from obligations to regulate threats to drinking water from fracking fluids, even when gas producers use diesel fuels in their fracking operations. See EARTHWORKS & OIL & GAS ACCOUNTABILITY PROJECT, *supra* note 75, at 8.

⁷⁸ Resource Conservation and Recovery Act, 42 U.S.C. § 6921(b)(2)(A) (2012). The exemption states, “the term ‘underground injection’ (b) excludes (i) the underground injection of natural gas for purposes of storage; and (ii) the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.” *Id.*

opment of oil and natural gas.⁷⁹ In 1988, the EPA issued a regulatory determination further exempting oil and natural gas producers from RCRA standards.⁸⁰

Although unsuccessful, Congress has attempted to regulate the fracking industry with the Fracturing Responsibility and Awareness of Chemicals Act (the “FRAC Act”) in 2009.⁸¹ The purpose of the FRAC Act was to define hydraulic fracturing as a federally regulated activity under the SDWA.⁸² The bill would have closed the Halliburton Loopholes and would have required the oil and gas industry to disclose all chemical additives used in fracking fluid, but it never made it out of committee.⁸³ The FRAC Act was reintroduced in 2011, but gained little traction and was once again declared dead.⁸⁴ In June 2013, the FRAC Act was introduced for a third time, but according to the government transparency website GovTrack.us, the bill stands only a one percent chance of being enacted.⁸⁵

II. TRADE SECRET LAWS AND THE FRACKING INDUSTRY

A. *What Is a Trade Secret?*

A trade secret is confidential information that gives a competitive advantage and value to its holder because of its secrecy.⁸⁶ Federal law also

⁷⁹ *Id.*; Env'tl. Prot. Agency, Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. 25447, 25447 (1988), available at <http://www.epa.gov/osw/nonhaz/industrial/special/oil/og88wp.pdf>, archived at <http://perma.cc/R7SP-5NP6>.

⁸⁰ 42 U.S.C. § 6921(b)(2)(A). In its 1988 determination, the EPA noted that although waste from oil and natural gas contained chemicals such as benzene, arsenic, lead, and uranium, and were at levels that exceeded 100 times EPA's health-based standards, oil and gas companies were excused from requirements. Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. at 25448.

⁸¹ Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, S. 1215, 111th Cong. (2009) (as referred to Senate Env't and Pub. Works Comm.); H.R. 2766, 111th Cong. (2009) (as referred to the Subcomm. On Energy and Env't); see *Bill Summary & Status: 111th Congress (2009-2010) H.R. 2766*, LIBRARY OF CONGRESS: THOMAS, <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:HR02766:@@X> (last visited Oct. 28, 2014), archived at <http://perma.cc/65UB-TAYH>.

⁸² See S. 1215 (2009); H.R. 2766 (2009).

⁸³ See S. 1215 (2009); H.R. 2766 (2009).

⁸⁴ See Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, S. 587, 112th Cong. (2011), available at <https://www.govtrack.us/congress/bills/112/s587>, archived at <http://perma.cc/VVG4-G2UW>. The inability to pass the bill is attributed to the oil and gas industry's substantial lobbying efforts, including spending \$747 million in lobbying and political campaign spending over the past ten years, in an effort to persuade government officials to ignore the dangers of fracking. JAMES BROWNING & ALEX KAPLAN, COMMON CAUSE, DEEP DRILLING, DEEP POCKETS IN CONGRESS 1, 3 (2011).

⁸⁵ Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, S. 1135, 113th Cong. (2013), available at <https://www.govtrack.us/congress/bills/113/s1135>, archived at <http://perma.cc/6T3P-GLWH>.

⁸⁶ Tom C.W. Lin, *Executive Trade Secrets*, 87 NOTRE DAME L. REV. 911, 940 (2012).

defines trade secrets as three-part entities.⁸⁷ As defined under 18 U.S.C. § 1839, a trade secret is (1) information, where there has been (2) reasonable measures taken to protect the information, and (3) which derives independent economic value from not being publically known.⁸⁸ In addition to federal law, forty-seven states and the District of Columbia have adopted a version of the Uniform Trade Secrets Act (“UTSA”), which establishes similar requirements as those set forth in 18 U.S.C. § 1839.⁸⁹

In states that have not adopted a version of the UTSA, the Restatement (First) of Torts (the “Restatement”) guides the definition of a trade secret.⁹⁰ The Restatement sets out six factors that determine whether information is a trade secret.⁹¹ Those are: (1) the extent to which the information is known outside the holder’s business; (2) the extent to which the information is known by employees and others within the business; (3) the extent of the measures taken to guard the secrecy of the information; (4) the value of the information to the holder and its competitors; (5) the amount of effort or money expended in developing the information; and (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.⁹²

Trade secrets are used to protect significant amounts of information for companies while adding economic value.⁹³ Information protected might include contracts, production methods, strategies, or chemical information.⁹⁴ Trade secret law protects valuable information from competitors for the purpose of ensuring that businesses can maintain a competitive advantage by protecting information crucial to their success.⁹⁵ The legal policy underlying

⁸⁷ See 18 U.S.C. § 1839 (2012).

⁸⁸ *Id.*

⁸⁹ See *id.*; UNIF. TRADE SECRETS ACT § 1 (amended 1985), available at http://www.uniformlaws.org/shared/docs/trade%20secrets/utsa_final_85.pdf, archived at <http://perma.cc/D9F7-9UVB>; *Legislative Fact Sheet-Trade Secrets Act*, UNIF. LAW COMM’N, <http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Trade%20Secrets%20Act> (last visited Oct. 4, 2014), archived at <http://perma.cc/DY97-TJ76>. The UTSA defines trade secret as, “information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.” UNIF. TRADE SECRETS ACT § 1.

⁹⁰ THOMAS DUSTON & THOMAS ROSS, *INTELLECTUAL PROPERTY PROTECTION FOR TRADE SECRETS AND KNOW-HOW* (2003), available at http://www.ipo.org/wp-content/uploads/2013/04/IP_Protection_for_Trade_Secrets_and_Know-how1076598753.pdf, archived at <http://perma.cc/VEV8-3GRT>.

⁹¹ RESTATEMENT (FIRST) OF TORTS § 757 (1939).

⁹² *Id.*

⁹³ See Lin, *supra* note 86, at 941.

⁹⁴ See *id.*

⁹⁵ David R. Hannah, *Should I Keep a Secret? The Effects of Trade Secret Protection Procedures on Employees’ Obligations to Protect Trade Secrets*, 16 ORG. SCI. 71, 72 (2005).

the protection of trade secrets is to drive economic growth and business development and to incentivize new ideas.⁹⁶

B. The Fracking Industry's Utilization of Trade Secrets and the Regulation of Fracking Chemicals Under Trade Secret Law

Oil and gas companies have attempted to keep the chemicals used in the hydraulic fracturing (“fracking”) process secret from the government and the public by claiming their proprietary mixtures are trade secrets.⁹⁷ They claim that releasing chemical names and formulas would allow competitors to reverse engineer their fracking fluids, thereby destroying their protection under trade secrets law.⁹⁸

Some states have laws that require oil and gas companies to disclose the chemicals used in fracking.⁹⁹ This disclosure is usually necessary to obtain a permit to drill a new well.¹⁰⁰ Specifically, a company will send a list of chemicals to the oil and gas commission of the state in which the company plans to drill.¹⁰¹ This information is usually kept confidential however, if the commission finds the chemical to be a trade secret.¹⁰² For example, between 2010 and 2012, the Wyoming Oil and Gas Commission approved seventy-eight additives in fracking fluid as trade secrets.¹⁰³ Other states have required oil and gas companies to disclose the chemicals used in fracking online, but these disclosures may exclude chemicals the reporting com-

⁹⁶ David S. Almeling, *Seven Reasons Why Trade Secrets Are Increasingly Important*, 27 BERKLEY TECH. L.J. 1091, 1104 (2012).

⁹⁷ See *Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm'n*, No. 94650, 2013 WL 8718518, at *1 (Wyo. Dist. Ct. Mar. 21, 2013), *rev'd* 320 P.3d 222 (Wyo. 2014); Elgin et al., *supra* note 6; Susan Phillips, *Pennsylvania Doctors Worry Over Fracking 'Gag Rule'*, NPR (May 17, 2012, 5:30 PM), <http://www.npr.org/2012/05/17/152268501/pennsylvania-doctors-worry-over-fracking-gag-rule>, *archived at* <http://perma.cc/ZMX6-R95A>. Although the federal government requires information regarding toxic chemical releases and waste management activities under the Emergency Planning and Community Right to Know Act (EPCRA), the EPA has not included oil and gas extraction as an industry that needs to report this information to the Toxics Release Inventory database established by EPCRA. *Chemicals and Public Disclosure*, FRAC FOCUS CHEM. DISCLOSURE REGISTRY, <http://fracfocus.org/chemical-use/chemicals-public-disclosure> (last visited Oct. 4, 2014), *archived at* <http://perma.cc/3M6H-8D3Y>.

⁹⁸ *Powder River Basin Res. Council*, 2013 WL 8718518, at *3; Hopyy Kercheval, *Bill Keeps Fracking Fluid Ingredients Secret*, METRONews (Apr. 9, 2013, 5:10 PM), <http://www.metronews.com/2013/04/09/bill-keeps-fracking-fluid-ingredients-secret/>, *archived at* <http://perma.cc/F8UM-FCNS>. Oil and gas companies argue that this technology cost tens of millions of dollars to create, and therefore, it must be protected. See Kercheval, *supra* note 98.

⁹⁹ *E.g.*, TEX. NAT. RES. CODE ANN. § 91.851 (West 2011); 20-3 WYO. CODE R. § 45(d) (LexisNexis 2012).

¹⁰⁰ See 20-3 WYO. CODE R. § 45(d).

¹⁰¹ *Id.*; *Powder River Basin Res. Council*, 2013 WL 8718518, at *1.

¹⁰² See WYO. STAT. ANN. § 16-4-203(d)(v) (West 2012); Elgin et al., *supra* note 6.

¹⁰³ Elgin et al., *supra* note 6. In Oklahoma, almost one third of the components listed were classified as trade secrets or did not have valid identification numbers attached. *Id.*

panies consider to be trade secrets, as companies retain the discretion to classify these chemicals as confidential.¹⁰⁴

Trade secret confidentiality has also proven problematic for medical professionals seeking to treat fracking related ailments, and states are grappling with how to reconcile trade secrets with the need for accurate information in health care diagnoses.¹⁰⁵ For example, Pennsylvania law states that oil and gas companies must disclose the chemicals used in fracking online, but the industry may claim that chemicals are trade secrets and exclude them from disclosure.¹⁰⁶ This makes it difficult for doctors to treat patients who show symptoms of chemical exposure, as they are unable to identify the specific chemical and requisite form of treatment.¹⁰⁷ To rectify the issue, in 2012, the Pennsylvania government passed a law that grants doctors and other health professionals access to information about the trade secret chemicals used in the fracking process, but only after the doctors sign a confidentiality agreement, thus ensuring they cannot reveal this critical information to their patients.¹⁰⁸

C. Judicial Treatment of Trade Secrets in Fracking

In 2012, in *Powder River Basin Resources Council v. Wyoming Oil & Gas Conservation Commission*, the Wyoming District Court considered a trade secret argument to protect fracking secrecy after the Wyoming Oil and Gas Conservation Commission (“WOGCC”) refused to release information regarding chemicals used by a fracking company.¹⁰⁹ Environmental groups and landowners brought the case against the WOGCC and Halliburton Energy Services, Inc.¹¹⁰ The plaintiffs’ requested that the WOGCC provide them with the information it had received about the chemical formulations that the owners and operators were using in fracking operations.¹¹¹

The plaintiffs based their lawsuit on a Wyoming law passed in 2010 that requires fracking well operators to submit chemical formulations of their products to the WOGCC prior to initiating the bore and after completing any well stimulation activity.¹¹² The Wyoming law exempts this infor-

¹⁰⁴ *Id.* For example, North Dakota requires companies to report to the website FracFocus.com, but companies can determine what chemicals are labeled trade secrets. *Id.* FracFocus.com does not check trade secret claims. *Id.*

¹⁰⁵ See *Pennsylvania Doctors Worry Over Fracking ‘Gag Rule,’* *supra* note 97.

¹⁰⁶ 58 PA. CONS. STAT. § 3222(b)(3) (2011).

¹⁰⁷ *Pennsylvania Doctors Worry Over Fracking ‘Gag Rule,’* *supra* note 97.

¹⁰⁸ 58 PA. CONS. STAT. § 3222(b)(3); *Pennsylvania Doctors Worry Over Fracking ‘Gag Rule,’* *supra* note 97.

¹⁰⁹ *Powder River Basin Res. Council*, 2013 WL 8718518, at *1.

¹¹⁰ *Id.* at *3.

¹¹¹ *Id.*

¹¹² *Id.* at *1; see 20-3 WYO. CODE R. § 45(d) (LexisNexis 2012).

mation from disclosure to the public if an operator so requests, and if the WOGCC Supervisor (“Commission Supervisor”)—a professional petroleum engineer or petroleum geologist—finds that the information is a trade secret.¹¹³

When the plaintiffs requested documents submitted by the well operators, the Commission Supervisor responded by directing the parties to filings on the WOGCC’s website, and by providing documentation, citing requests for confidentiality.¹¹⁴ All documents containing information about chemical formulations and their ingredients had been deemed trade secrets and were redacted.¹¹⁵ The redacted information included the chemical compound names, the chemical compound type, the chemical abstract services (“CAS”) number, and the concentrations for each ingredient.¹¹⁶ The defendants asserted that this information should be protected as a trade secret because competitors could use the chemicals and other production information to reverse engineer these fracking compounds.¹¹⁷ The plaintiffs argued that the WOGCC acted arbitrarily and capriciously when it found that individual ingredients of hydraulic fracturing formulas constituted trade secrets under the public disclosure rule and the Wyoming Public Records Act.¹¹⁸

The Commission Supervisor, who argued that the chemical information was a trade secret, used a test taken from New York to evaluate trade secret requests.¹¹⁹ The six identified factors are the same factors used in the Restatement (First) of Torts.¹²⁰

The Wyoming District Court granted summary judgment to the defendants.¹²¹ When a request to inspect public records is made in Wyoming, the custodian of records weighs the competing interests involved, and determines whether permitting inspection would result in harm to the public interest that outweighs the legislative concerns, while recognizing the public interest in allowing inspection of the records.¹²² The Wyoming District Court stressed the policy underlying the Wyoming code and stated that although the public should have access to documents that reveal details of op-

¹¹³ See WYO. STAT. ANN. § 16-4-203(d)(v) (West 2012); 20-3 WYO. CODE R. § 45(d).

¹¹⁴ *Powder River Basin Res. Council*, 2013 WL 8718518, at *1.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at *3.

¹¹⁷ *Id.* at *8.

¹¹⁸ *Id.* at *4.

¹¹⁹ *Id.* at *7.

¹²⁰ *Id.*; RESTATEMENT (FIRST) OF TORTS § 757 (1939); see *supra* note 92 and accompanying text.

¹²¹ *Powder River Basin Res. Council*, 2013 WL 8718518, at *9.

¹²² *Id.* at *5.

erations of government entities, deference to the WOGCC, and keeping fracking chemicals a secret, was proper in the case.¹²³

III. SECRECY IN LITIGATION GENERALLY

A. What Is Necessary to Prove an Environmental Tort Claim

When citizens file a claim against an oil and gas company for damages related to injuries suffered from hydraulic fracturing (“fracking”), claims usually take the form of a tort suit.¹²⁴ The most common claims are thus nuisance, strict liability, trespass, and negligence.¹²⁵ Further, many lawsuits against oil and gas companies take the form of toxic tort suits.¹²⁶ A toxic tort is a civil offense that results from exposure to a toxic substance.¹²⁷ To prove a toxic tort occurred, a plaintiff must establish both legal and medical causation.¹²⁸ To prove legal causation, the plaintiff must first show that the defendant breached a legal duty to the plaintiff that resulted in an injury.¹²⁹ Medical causation is then the probability that the suspected source caused the plaintiff’s injury.¹³⁰ Causation in a toxic tort case can be difficult to prove because of latency periods between exposure to the substance and the onset of illness, identifying the source of contamination, and identifying the specific toxin.¹³¹

Within the toxic tort realm, many cases proceed on a negligence theory of liability.¹³² Negligence includes conduct that falls below the standard established by law for the protection of the public against unreasonable risk

¹²³ *Id.* at *9. The Wyoming Supreme Court reversed and remanded *Powder River Basin Resource Council* due to a procedural issue in March, 2014. *Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm’n*, 320 P.3d 222, 224 (Wyo. 2014). The court held that the lower court should consider the trade secret argument with reference to federal Freedom of Information Act precedent, but declined to determine whether individual chemical ingredients could be trade secrets. *Id.* at 230, 235.

¹²⁴ See Hall & Godshall, *supra* note 22, at 13; Coman, *supra* note 71, at 145.

¹²⁵ Hall & Godshall, *supra* note 22, at 13. Other common claims against oil and gas companies include breach of contract and fraud. *Id.*

¹²⁶ *Strudley v. Antero Res. Corp.*, No. 2011 CV 2218, 2012 WL 1932470, at *1 (Colo. Dist. Ct. May 9, 2012), *rev’d* No. 12CA1251, 2013 WL 3427901 (Colo. App. Ct. July 3, 2013), *cert. granted*, No. 13SC576, 2014 WL 1357327 (Colo. Apr. 7, 2014); see Hall & Godshall, *supra* note 22, at 13.

¹²⁷ RHON E. JONES & MARK ENGLEHART, BEASLEY ALLEN, LITIGATING TOXIC TORTS 1 (2007), available at <http://www.beasleyallen.com/webfiles/Litigating%20Toxic%20Torts.pdf>, archived at <http://perma.cc/Y84C-VLYA>.

¹²⁸ Elizabeth A. Stundtner, *Proving Causation in Toxic Tort Cases: T-Cell Studies as Epidemiological Particularistic Evidence*, 20 B.C. ENVTL. AFF. L. REV. 335, 335 (1993).

¹²⁹ JONES & ENGLEHART, *supra* note 127, at 2.

¹³⁰ *Id.*

¹³¹ Danielle Conway-Jones, *Factual Causation in Toxic Tort Litigation: A Philosophical View of Proof and Certainty in Uncertain Disciplines*, 35 U. RICH. L. REV. 875, 879 (2002).

¹³² Hall & Godshall, *supra* note 22, at 14.

of harm.¹³³ It is, in other words, a failure to exercise reasonable or ordinary care.¹³⁴ The traditional elements of negligence apply to a toxic tort case.¹³⁵ They are: (1) the existence of a duty owed by the defendants to a foreseeable plaintiff or a class of persons including the plaintiff; (2) a breach of that duty by the defendant(s); (3) a causal relationship linking the defendant's conduct to the plaintiff's injuries; and (4) a resulting injury to the plaintiff.¹³⁶

As stated, causation of injury is difficult to prove for plaintiffs in a toxic tort fracking suit.¹³⁷ Sampling and extensive testing is required to prove contamination.¹³⁸ Furthermore, it can be difficult to prove the cause of the contamination, as some harmful substances are found naturally in areas where drilling occurs.¹³⁹ Yet another hurdle for plaintiffs trying to prove a fracking toxic tort is a lack of data demonstrating water quality before the fracking.¹⁴⁰

In May 2012, in *Strudley v. Antero Resources Corp.*, a Colorado District Court held that the plaintiffs did not meet the burden of proof to establish a case against a fracking company.¹⁴¹ The plaintiffs, whose land had been part of a natural gas extraction, claimed that they suffered health injuries as a result of the hazardous gases, chemicals, and industrial wastes that contaminated their well water.¹⁴² In lieu of a long discovery process, the judge issued a Lone Pine order, requiring the plaintiffs to prove the specific chemical or substance that caused their injuries, the specific disease, illness or injury caused by the substance, and a causal link between exposure and injury.¹⁴³ Although the plaintiffs submitted an affidavit from an expert as-

¹³³ JONES & ENGLEHART, *supra* note 127, at 10.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ See ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY 139, 152–53 (4th ed. 2010); Conway-Jones, *supra* note 131, at 876; Hall, *supra* note 11, at 74.

¹³⁸ Hall, *supra* note 11, at 74.

¹³⁹ *Id.* Arsenic and methane can be found naturally in the groundwater in some areas. *Id.* at 74–75.

¹⁴⁰ *Id.* at 76. Several states, including Colorado, require baseline testing before drilling, whereas other states, such as Pennsylvania, encourage baseline testing, but do not require it. *Id.* at 76–77.

¹⁴¹ 2012 WL 1932470, at *3.

¹⁴² *Id.* *Strudley* appears to be the first fracking contamination or personal injury claim to go to final judgment. Hall, *supra* note 11, at 74. See generally *Strudley*, 2012 WL 1932470.

¹⁴³ Hall, *supra* note 11, at 74. The “Lone Pine” order originated in a toxic tort case in which the plaintiffs were ordered to produce evidence that would be essential for them to prove their claims before the case proceeded. *Id.* Lone Pine orders require plaintiffs to present evidence to support elements of a claim including causation or damages. *Id.* at 82. As discovery is either limited or stayed while a Lone Pine order is pending, plaintiffs often argue that these orders unfairly

serting that they could not prove causation without further discovery, the court dismissed the action for lack of evidence.¹⁴⁴ The appeals court reversed and remanded the decision, and it is now on appeal at the Colorado Supreme Court.¹⁴⁵

In April, 2014, in *Parr v. Aruba Petroleum, Inc.*, a jury in Texas issued a judgment awarding a family sickened by fracking \$2.9 million in damages for suffering an intentional private nuisance, diminished property value, negligence, and pain and suffering.¹⁴⁶ The family suffered significant health problems, including nosebleeds, vision problems, and rashes.¹⁴⁷ *Parr* is being touted as the first jury verdict entered against a fracking company, and it is the largest verdict of its kind.¹⁴⁸ The unusual win is being partially attributed to the increased availability of information used to demonstrate the link between fracking and the family's injuries, further bolstering the obvious need for greater transparency.¹⁴⁹

B. Complaints and Settlements: The Process

The communities situated above shale deposits tend to be low-income.¹⁵⁰ Residents in these areas are often asked to grant oil and gas companies the rights to drill below their homes to extract natural gas in exchange for compensation.¹⁵¹ In Amwell Township, Pennsylvania—where the per capita annual income in 2000 was \$18,285—residents who signed away rights to their land earned between \$1500 and \$500,000, in addition to royalties.¹⁵² These payouts are available because oil and gas companies must pay landowners for access to the surface and mineral rights on their

require them to present evidence too early in the case before enough discovery is done. *See id.* at 82–83.

¹⁴⁴ *Strudley*, 2012 WL 1932470, at *3; Hall, *supra* note 11, at 74.

¹⁴⁵ Hall, *supra* note 11, at 74. In three other recent cases in which plaintiffs claimed that fracking caused contamination, the courts considered whether or not to grant Lone Pine orders, but decided that it was not appropriate in the given situations, while emphasizing that courts do have authority to issue these orders. *Id.*

¹⁴⁶ Jason Morris, *Texas Family Plagued with Ailments Gets \$3M in Ist-of-Its-Kind Fracking Judgment*, CNN (Apr. 26, 2014, 8:41 AM), <http://www.cnn.com/2014/04/25/justice/texas-family-wins-fracking-lawsuit/>, archived at <http://perma.cc/B7SN-24CW>.

¹⁴⁷ Morris, *supra* note 146.

¹⁴⁸ Emily Atkin, *In Landmark Ruling, Jury Says Fracking Company Must Pay \$3 Million to Sickened Family*, CLIMATEPROGRESS (Apr. 23, 2014, 1:22 PM), <http://thinkprogress.org/climate/2014/04/23/3429788/fracking-verdict/>, archived at <http://perma.cc/6Q3Z-RVH5>.

¹⁴⁹ *Id.* It has been suggested recently that people have been better able to document impacts from fracking, and this gradual increase in information led to the first successful result for plaintiffs in front of a jury. *Id.*

¹⁵⁰ Griswold, *supra* note 1, at SS1–46. Fracking is a large industry in areas such as West Virginia, Pennsylvania, Texas, and Oklahoma. *Id.*; Morris et al., *supra* note 3.

¹⁵¹ Griswold, *supra* note 1, at SS1–46.

¹⁵² *See id.*

land.¹⁵³ If, however, a landowner does not own the mineral rights, the owner can either agree to let the company drill on the surface, or an oil and gas company can use a horizontal drilling technique, which allows access to subterranean natural gas without violating any surface property rights.¹⁵⁴ Because many such landowners are unable to afford an extended legal battle, there are few options to recover when they are injured.¹⁵⁵

Settling out of court is a common practice in all areas of litigation, and it is often encouraged because it reduces the burden on courts, cuts costs, and allows for greater access to legal proceedings without the expense of prolonged litigation.¹⁵⁶ Likewise, lawsuits against oil and gas companies are generally settled.¹⁵⁷ Dan Whitten, a spokesman for America's Natural Gas Alliance, said, "[t]he practice is common in every type of litigation in every industry . . . it is the case that it is less burdensome to settle—even on claims that have no merit—than to go into a protracted court battle."¹⁵⁸

Settlement agreements are treated as private contracts and usually do not need to be filed with the court.¹⁵⁹ There are some circumstances, however, in which the parties must seek the court's approval for the agreement and then must file it with the court.¹⁶⁰ Such instances are usually either in class action lawsuits or settlements involving minors.¹⁶¹

Settlement agreements between landowners and oil and gas companies include different provisions for payment, land ownership, and future royalties.¹⁶² Further, settlement agreements in disputes with the oil and gas industry, both in and out of court, are traditionally sealed and cannot be accessed by members of the public or the media.¹⁶³ Eric Wohlschegel, a spokesman for the American Petroleum Institute once said, "settlements are

¹⁵³ See *id.*

¹⁵⁴ See *Beyond Coastal Oil v. Garza: Nuisance and Trespass in Hydraulic Fracturing Litigation*, *supra* note 19, at 10; Laura Amos, *A Family's Water Well was Contaminated After Hydraulic Fracturing Near Their Home*, EARTHWORKS (Sept. 20, 2011), http://www.earthworksaction.org/voices/detail/laura_amos#_Ux5XFXkwhjQ, archived at <http://perma.cc/Y38N-D2E8>.

¹⁵⁵ See Griswold, *supra* note 1, at SS1–46.

¹⁵⁶ Laurie Kratky Dore, *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, 74 NOTRE DAME L. REV. 283, 289, 292–93 (1999).

¹⁵⁷ Efstathiou & Drajem, *supra* note 2.

¹⁵⁸ *Id.*

¹⁵⁹ Laura Kratky Dore, *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, 55 S.C. L. REV. 791, 800 (2004). Settlements are often reached without any judicial involvement or judicial participation in determining the terms of the agreement. *Id.*

¹⁶⁰ *Id.* at 795–96.

¹⁶¹ *Id.*

¹⁶² Suzuki, *supra* note 33, at 282; Efstathiou & Drajem, *supra* note 2.

¹⁶³ Efstathiou & Drajem, *supra* note 2.

sealed for a variety of reasons, are common in litigation, and are done at the request of both landowners and operators.”¹⁶⁴

A settlement can be sealed in multiple ways.¹⁶⁵ The parties may reach an agreement during litigation and may ask the judge to approve the settlement and its confidentiality.¹⁶⁶ Alternatively, a plaintiff may agree to drop the case against the defendant in exchange for a settlement agreement, which in turn requires secrecy.¹⁶⁷

Whereas settlement agreements that are struck out of court can be kept confidential, in-court settlement confidentiality is at the discretion of the judge.¹⁶⁸ A Pennsylvania state trial court recently ruled in *Hallowich v. Range Resources Corporation* that there was not a sufficient reason to keep a settlement agreement between an oil and gas company and the plaintiffs sealed.¹⁶⁹ The plaintiffs, the Hallowich family, threatened a lawsuit against Range Resources Appalachia, LLC, Laurel Mountain Midstream, LLC, and MarkWest Energy Partners, L.P., in 2011, after suffering from headaches, burning eyes, and sore throats.¹⁷⁰ Before filing suit, the Hallowichs drafted a complaint for the purposes of negotiating a settlement agreement with the companies.¹⁷¹ In the complaint, they alleged that the companies’ development of natural gas on a neighboring property had caused contamination of their drinking water and a release of gases and odors onto their property.¹⁷²

Despite being reached out of court, the settlement between the Hallowich family and the oil and gas companies had to be filed in court because it pertained to the family’s two young children, ages seven and ten.¹⁷³ The

¹⁶⁴ *A Tainted Water Well, and Concerns There May Be More, supra* note 2.

¹⁶⁵ Alison Lothes, Comment, *Quality, Not Quantity: An Analysis of Confidential Settlements and Litigants’ Economic Incentives*, 154 U. PA. L. REV. 433, 435 (2005).

¹⁶⁶ *See id.* This creates a court order of secrecy. *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *See* 30 Pa. D. & C.5th 91, 127 (Pa. C.P. 2013), *vacated*, 54 A.3d 13 (Pa. Super. Ct. 2012); *infra* notes 169–83 and accompanying.

¹⁶⁹ *Hallowich*, 30 Pa. D. & C.5th at 127 (holding the oil and gas company’s argument that confidentiality was essential to protecting its business interests to be insufficient); *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement, supra* note 156, at 292. This decision demonstrates that courts are willing to unseal agreements if they are unfair or inequitable. *See Hallowich*, 30 Pa. D. & C.5th at 127.

¹⁷⁰ True and Correct Copy of Exhibit “B” to Plaintiffs’ Petition for Approval of Settlement of Minors’ Actions at 2, 3 *Hallowich v. Range Res. Corp.*, No. 2010-3954 (Pa. Ct. Com. Pl. Mar. 20, 2013), *available at* <http://blogs.star-telegram.com/files/hallowich-settlement.pdf>, *archived at* <http://perma.cc/D3QK-34BC> [hereinafter Settlement Agreement and Release].

¹⁷¹ *Id.* at 2.

¹⁷² Efstathiou & Drajem, *supra* note 2.

¹⁷³ *See id.* All settlements that pertain to minor children or others that are not a direct part of the proceedings must be filed in court. *Id.* Pennsylvania Rule of Civil Procedure 2039 provides that “no action to which a minor is a party shall be compromised, settled or discontinued except after approval by the court pursuant to a petition presented by the guardian of the minor.” PA. R. CIV. P. 2039.

companies agreed to pay the Hallowich family \$750,000 and granted them the rights to continued royalties from the well.¹⁷⁴ Further, the settlement required that the family grant the property rights to their home and land to the gas companies.¹⁷⁵ In exchange, the Hallowich family is precluded from ever bringing a claim against the oil and gas companies and cannot participate in any protests or future claims brought by other parties against the companies.¹⁷⁶ The parties also agreed to a joint statement of confidentiality, whereby they will not make any statements or comments, directly or indirectly, to any third party regarding the well operators, oil and gas development, fracking, their experience with any of the well operators or oil and gas companies, natural gas drilling or other operations, or Marcellus Shale activity.¹⁷⁷ The agreement further forbids the family from posting anything about the settlement or natural gas drilling on social media or engaging in any group or organization with a primary purpose of opposing oil and gas development.¹⁷⁸ Further, the settlement applies to the entire Hallowich family, including their two young children.¹⁷⁹

In 2013, after the Pittsburgh Post-Gazette and the Observer Reporter filed a claim to unseal the records stemming from the case, Judge Debbie O'Dell-Seneca of the Court of Common Pleas of Washington County, Pennsylvania ordered that the records be unsealed and made available to the public.¹⁸⁰ Judge O'Dell-Seneca ruled that businesses do not have a right to privacy within these settlement agreements, because they are not free and independent, and they must always be subservient to the law.¹⁸¹ Furthermore, Judge O'Dell-Seneca held that the Pennsylvania privacy statute specified that the rules and rights established by the statute apply to all legal persons.¹⁸² Pennsylvania courts however, have never extended the constitutional right to privacy to a corporation, company, or partnership.¹⁸³

¹⁷⁴ Efstathiou & Drajem, *supra* note 2.

¹⁷⁵ Settlement Agreement and Release, *supra* note 170, at 4.

¹⁷⁶ *Id.* at 7.

¹⁷⁷ *Id.* at 13.

¹⁷⁸ *Id.* at 13–14.

¹⁷⁹ *Id.* at 1. When asked at the settlement hearing if Range Resources would enforce the settlement and gag order against the Hallowich children, the lawyer for Range Resources said “we would certainly enforce it”; in August, 2013, however, Range Resources sent a letter to the Hallowich family stating that they would not seek “to hold a minor child legally accountable for a breach of that provision of the settlement agreement.” Don Hopey, *Hallowich Children Not Part of Marcellus Shale Gag Order Agreement*, PITTSBURGH POST-GAZETTE (Aug. 7, 2013, 8:00 AM), <http://www.post-gazette.com/local/washington/2013/08/07/Hallowich-children-not-part-of-Marcellus-Shale-gag-order-agreement/stories/201308070133>, archived at <http://perma.cc/M7B3-8XYX>.

¹⁸⁰ See *Hallowich*, 30 Pa. D. & C.5th at 128.

¹⁸¹ *Id.* at 115–16.

¹⁸² *Id.* at 116.

¹⁸³ *Id.* Although this case is encouraging, it is the exception, not the rule, and the gag order still applies, thus ensuring that confidentiality will still be a significant barrier to those who hope

C. Gag Orders and Future Confidentiality

Settlement agreements with oil and gas companies also traditionally include gag orders, which prevent all parties covered by the settlement from discussing any aspect of the case, or the fracking industry in general.¹⁸⁴ Plaintiffs who sign these agreements often agree to never disclose any information about the settlement provisions, their injuries, or the fracking industry.¹⁸⁵ As these gag orders are private contractual agreements, and confidentiality is a traditional part of settlement agreements, oil and gas companies have a legitimate right to add confidentiality clauses into settlement agreements.¹⁸⁶ Oil and gas companies consider this right so crucial in fact, that it has been reported that they refuse to settle without an extensive gag order.¹⁸⁷

For example, the Hallowich family, including their children, opted to sign a confidentiality agreement with Range Resources.¹⁸⁸ Prior to the settlement, Mrs. Hallowich was an outspoken critic of the fracking industry and had publically asserted that fracking had harmed her family's health.¹⁸⁹ In the settlement agreement however, the parties approved a joint statement of confidentiality, and agreed to not make any statements or comments, directly or indirectly, to any third party regarding the well operators, oil and gas development, fracking, their experience with any of the well operators or oil and gas companies, natural gas drilling or other operations, or Marcellus Shale activity.¹⁹⁰ This ban forbids the family from posting anything about the settlement or natural gas drilling on social media and from engaging in any group or organization with a primary purpose of opposing oil and gas development.¹⁹¹

Oil and gas companies have a great deal of money and power, and thus the ability to make legitimate threats of protracted litigation if those affected by their fracking operations do not agree to silence.¹⁹² For example, Laura

to share their stories about the harms of fracking. *See* Settlement Agreement and Release, *supra* note 170, at *7.

¹⁸⁴ *See* Settlement Agreement and Release, *supra* note 170, at *7, *13–14; Efstathiou & Drajem, *supra* note 2.

¹⁸⁵ *See* Settlement Agreement and Release, *supra* note 170, at *7, *13–14; Efstathiou & Drajem, *supra* note 2.

¹⁸⁶ *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800; Efstathiou & Drajem, *supra* note 2.

¹⁸⁷ Efstathiou & Drajem, *supra* note 2.

¹⁸⁸ *See* Settlement Agreement and Release, *supra* note 170, at *1. Two years after the settlement was reached, Range Resources retracted their statement that the children would be subject to the gag order. *See* Hopey, *supra* note 179.

¹⁸⁹ *See* Efstathiou & Drajem, *supra* note 2.

¹⁹⁰ Settlement Agreement and Release, *supra* note 170, at *7, *13–14.

¹⁹¹ *Id.*

¹⁹² Efstathiou & Drajem, *supra* note 2.

Amos of Silt, Colorado blamed fracking and subsequent water contamination when she developed a tumor.¹⁹³ She had witnessed her water well blowing out “like a geyser at Yellowstone,” and developed health problems that her doctor could not explain.¹⁹⁴ After her water supply was tested by the Colorado Oil and Gas Conservation Commission (“COGCC”), it determined that it was contaminated with methane, which was caused by fracking.¹⁹⁵ Amos filed a lawsuit against Encana Corporation (“Encana”), the oil and gas company that owned the fracking operation that caused the contamination, and she eventually came to a settlement agreement that included Encana purchasing her property.¹⁹⁶

Amos’ complaint and record of a settlement were disclosed, but the details were kept confidential.¹⁹⁷ Encana denied any wrongdoing.¹⁹⁸ Amos was later summoned to testify about her experience in front of a COGCC hearing about water testing and well testing,¹⁹⁹ but an Encana representative told her that she would be sued if she agreed to do it.²⁰⁰ As a result, she was essentially forced to ask the COGCC to withdraw the subpoena.²⁰¹ After a special hearing as to whether her testimony should be limited, the request for a subpoena was withdrawn and Amos did not testify.²⁰²

¹⁹³ *Id.*

¹⁹⁴ Amos, *supra* note 154.

¹⁹⁵ *Id.* The COGCC confirmed in writing that Encana contaminated Amos’s well. Letter from Brian J. Macke, Dir., Colo. Oil & Gas Conservation Comm’n, to Larry & Laura Amos (Feb. 3, 2005), available at http://www.earthworksaction.org/files/pubs-others/COGCC_Amos_Letter.pdf, archived at <http://perma.cc/63RM-6DMH>.

¹⁹⁶ Efstathiou & Drajem, *supra* note 2.

¹⁹⁷ Amos, *supra* note 154.

¹⁹⁸ Efstathiou & Drajem, *supra* note 2.

¹⁹⁹ *Id.*

²⁰⁰ *Id.* Heavy financial penalties for breaching the terms of an agreement are usually included in settlement confidentiality agreements to ensure silence. See Rachel Weiner, *Confidentiality Agreements: How Do They Work?*, WASH. POST (Nov. 2, 2011, 1:28 PM), http://www.washingtonpost.com/blogs/the-fix/post/confidentiality-agreements-how-do-they-work/2011/11/02/gIQAyNryfM_blog.html, archived at <http://perma.cc/S4ZG-T6AR>.

²⁰¹ *Id.* Laura Amos was previously a very vocal advocate against the fracking, and she wrote an article for EarthWorks that described her contaminated water and health problems. Amos, *supra* note 154.

²⁰² Efstathiou & Drajem, *supra* note 2.

IV. A POSSIBLE SOLUTION TO THE SECRECY PROBLEM: STATE SUNSHINE LAWS

A. Origin of Sunshine Laws

Confidentiality in courts, as well as secret settlement agreements and orders have been a topic of debate since the mid-1990s.²⁰³ In response to several controversies, including the Bridgestone/Firestone tire defect scandal²⁰⁴ and the Roman Catholic Church clergy abuse scandal,²⁰⁵ many states have attempted to adopt sunshine laws that restrict secrecy in courts and settlement agreements.²⁰⁶ Approximately nineteen states have passed a sunshine law or enacted a rule that limits secrecy in the courts.²⁰⁷ These laws however, vary greatly between states.²⁰⁸ Some states create a presumption of public access to court records,²⁰⁹ whereas others concern only discovery and protective orders.²¹⁰ Further, most reform is confined to the sealing of judicial records.²¹¹ Thirteen states have unsuccessfully attempted to enact legislation that would restrict secrecy orders and agreements in cases that could compromise public safety.²¹²

Even where they have been passed successfully, rules that prohibit sealing court documents related to a settlement agreement are unlikely to defeat the secrecy agreed to in most oil and gas industry settlement agreements, because most such agreements are legally a matter of private contract law, and do not trigger judicial scrutiny.²¹³ Under most state rules, un-

²⁰³ *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 792.

²⁰⁴ *Id.* Firestone recalled over fourteen million tires eight years after numerous product liability lawsuits were filed against the company concerning a tire that was linked to at least 250 deaths. *Id.* Most of these product liability suits were kept secret under protective orders and sealed settlements. *See id.*

²⁰⁵ Martha Neil, *Confidential Settlements Scrutinized*, A.B.A. J., July 2002, at 20, 22. Plaintiffs claimed that the Catholic Church settled cases only after victims and their families agreed not to discuss the abuse, meaning law enforcement officials were not informed of the abuse. *Id.*

²⁰⁶ *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 792.

²⁰⁷ *Id.* at 792 n.9.

²⁰⁸ *See id.*

²⁰⁹ *See, e.g.*, TEX. R. CIV. P. 76.

²¹⁰ *See, e.g.*, ARIZ. R. CIV. P. 26(c)(2) (requiring findings of fact concerning non-stipulated protective orders governing discovery).

²¹¹ *See* CONN. R. SUPER. CT. § 11-20(A) (effective July 1, 2003) (prohibiting sealing of materials on file or lodged with the court or in connection with a court proceeding absent notice to interested parties and affirmative trial court findings).

²¹² *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 793-94; *see* Diana Digges, *Confidential Settlements Under Fire in 13 States*, LAW. WKLY. USA, Apr. 30, 2001, at 353.

²¹³ *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 798, 800. "Parties to a contract are free to enter into

filed discovery can remain confidential pursuant to a private party agreement, even if it impacts public health, safety, or welfare.²¹⁴ Some states, however, have adopted laws that attempt to prevent private parties from contracting around bans on the release of information that could bring awareness to public harms and dangers traditionally masked by confidentiality agreements.²¹⁵

B. Sunshine Statutes in Texas and Arkansas

Several states have passed sunshine statutes to combat secrecy in courts when public welfare is at risk.²¹⁶ Sunshine statutes are premised on a historical presumption of public access to courts and court records and the idea that within a democratic system, citizens should be “concerned with overall justice.”²¹⁷ Texas has one of the broadest anti-secrecy rules.²¹⁸ Rule 76 of the Texas Rules of Civil Procedure creates a presumption of access to court records and states that no court order or opinion issued in the adjudication of a case may be sealed.²¹⁹ Court records include all documents, of any nature, filed in connection with any matter in civil court.²²⁰ It also includes settlement agreements of record that were not filed, but which seek to restrict disclosure of information concerning matters that have a probable adverse effect upon the general public health or safety, the administration of public office, or the operation of government.²²¹ Court documents also include discovery not filed of record concerning matters that have a probable adverse effect upon the general public health or safety, the administration of public office, or the operation of government, except discovery in cases originally initiated to preserve bona fide trade secrets or other intangible property rights.²²² Furthermore, court records may not be sealed unless the party seeking the secrecy order can establish a specific, serious, and substantial interest that clearly outweighs the presumption of public access,

whatsoever bargain they may desire” G.H.L. Fridman, *Freedom of Contract*, 2 OTTAWA L. REV. 1, 1–2 (1968).

²¹⁴ See *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 799.

²¹⁵ See ARK. CODE ANN. § 16-55-122 (West 2010); TEX. R. CIV. P. 76.

²¹⁶ See, e.g., ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76.

²¹⁷ Nick Saccone, Comment, *Somewhere Between Florida, Texas, and Federal Rule of Civil Procedure 26(C): A Balanced Approach to Protective Orders and Confidential Settlements*, 39 U. TOL. L. REV. 729, 732 (2008).

²¹⁸ TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800 n.9.

²¹⁹ See TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800 n.9.

²²⁰ TEX. R. CIV. P. 76.

²²¹ *Id.*

²²² *Id.*

adverse impacts on public safety, and the absence of any less restrictive agreements.²²³

Arkansas has also attempted to limit settlement agreements outside of court that could cause harm to the environment and to public health, safety, and welfare.²²⁴ The law states, “[a]ny provision of a contract or agreement entered into to settle a lawsuit which purports to restrict any person’s right to disclose the existence or harmfulness of an environmental hazard is declared to be against the public policy of the State of Arkansas and therefore void.”²²⁵ The statute also provides that an environmental hazard means, “a substance or condition that may affect land, air, or water in a way that may cause harm to the property or person of someone other than the contracting parties to a lawsuit settlement.”²²⁶ Both states’ statutes attempt to protect the public from harm related to environmental hazards.²²⁷

V. THE PROBLEMS OF SECRECY WITHIN THE FRACKING INDUSTRY

Government officials and members of the oil and gas industry consistently claim that hydraulic fracturing (“fracking”) has never resulted in injury to human health.²²⁸ Leaders of the industry continue to argue that fracking is safe, and presents no danger.²²⁹ Furthermore, officials have testified that there has never been an instance of a freshwater aquifer being contaminated due to fracking.²³⁰

Despite these claims of safety, there have been many reports around the country of injuries to health and poor water and air quality in areas where fracking occurs.²³¹ Although the Environmental Protection Agency (EPA) has conducted narrow studies of the impacts of fracking, the federal government has yet to conduct a broad, comprehensive study of the impact of fracking on human health and the environment, and fracking is still exempt from many federal statutes and regulations designed to protect the en-

²²³ *Id.*; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800 n.9.

²²⁴ See ARK. CODE ANN. § 16-55-122 (West 2010).

²²⁵ *Id.*

²²⁶ See *id.*; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800 n.9.

²²⁷ See ARK. CODE ANN. §16-55-122; TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800 n.9.

²²⁸ See *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2; Efstathiou & Drajem, *supra* note 2.

²²⁹ See *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2; Efstathiou & Drajem, *supra* note 2.

²³⁰ *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

²³¹ Griswold, *supra* note 1, at SS1–47; FRACKNATION, *supra* note 4; GASLAND, *supra* note 4; Morris et al., *supra* note 3.

vironment.²³² This has led to a significant lack of information available to private citizens who receive attractive offers for land rights from oil and gas companies.²³³ The information gap has thus caused social and environmental injustice.²³⁴ The lack of public information makes it difficult for property owners to make informed decisions on whether to allow oil and gas companies to frack their land, especially when the only other information they have available is the information presented by the oil and gas companies, depicting fracking as safe and lucrative.²³⁵

In addition to the lack of an extensive study, the lack of federal oversight of the fracking industry has contributed to the government's dearth of knowledge about fracking, which in turn makes it difficult for the government to protect the public health, safety, and welfare.²³⁶ A prominent illustrative example of this is that oil and gas companies are not required to obtain permits under the Clean Water Act (CWA) or the Safe Drinking Water Act (SDWA), which results in little federal monitoring of the disposal of fracking fluid or waste.²³⁷ Exemption from these statutes has also contributed to the trade secret argument, as companies are not required, under federal law, to disclose chemical compounds used in the fracking process.²³⁸ It is difficult to combat claims of safety without concrete knowledge of what chemicals are used while drilling a well and fracking it and thus these exemptions have largely prevented the government from doing so.²³⁹

As a result of the lack of a comprehensive study of the effects and impacts of fracking, the argument against full disclosure of all chemicals is a difficult hurdle for environmental activists and watchdog groups to overcome.²⁴⁰ Protection of trade secrets is embedded in federal and state law, and often gives companies a great deal of discretion when choosing to keep

²³² See *Pressure Limits Efforts to Police Drilling for Gas*, *supra* note 61. See generally 2004 REPORT, *supra* note 60.

²³³ See Efstathiou & Drajem, *supra* note 2.

²³⁴ See *infra* notes 235–67 and accompanying text.

²³⁵ See Griswold, *supra* note 1, at SS1–46. This is a crucial environmental justice concern because many landowners who are presented with offers from oil and gas companies are facing poverty and debt. See *id.*; *Energy: The Pros and Cons of Shale Gas Drilling*, *supra* note 10.

²³⁶ See 33 U.S.C. § 1342(l) (2012); 42 U.S.C. § 300h-4 (2012); Jonathan D. Silver, *Federal Oversight of Fracking in Dispute*, PITTSBURGH POST-GAZETTE (Apr. 3, 2011, 12:00 AM), <http://www.post-gazette.com/news/nation/2011/04/03/Federal-oversight-of-fracking-in-dispute/stories/201104030215>, archived at <http://perma.cc/373F-MPQJ>.

²³⁷ See 33 U.S.C. § 1342(l); 42 U.S.C. § 300h-4.

²³⁸ See *Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm'n*, No. 94650, 2013 WL 8718518, at *8 (Wyo. Dist. Ct. Mar. 21, 2013), *rev'd* 320 P.3d 222 (Wyo. 2014); Elgin et al., *supra* note 6.

²³⁹ See Hall, *supra* note 11, at 71.

²⁴⁰ See *Powder River Basin Res. Council*, 2013 WL 8718518, at *9. See generally 2004 REPORT, *supra* note 60.

chemicals secret.²⁴¹ Although some states require full disclosure to government commissions, the reviewing commission officials weigh the competing interests—of the public versus the owner of the information—when considering a request to make information public, and frequently decline to unseal the information.²⁴²

Fracking is a lucrative industry that has created an economic boom in many states.²⁴³ Although the disclosure of chemical compounds used in fracking fluids is crucial to obtaining a complete understanding of its environmental and health impacts, industry claims that full disclosure would be prohibitively detrimental are difficult to overcome.²⁴⁴

Private civil litigation has been equally ineffective at providing accurate information about fracking to landowners and watchdog groups.²⁴⁵ Discouraging settlements between oil and gas companies and injured plaintiffs is neither practical, nor feasible, as it would make it very difficult for plaintiffs to recover compensation and would result in massive litigation expenses for both sides.²⁴⁶ Furthermore, causation is a difficult hurdle for plaintiffs, and thus settlement increases their chances of recovery.²⁴⁷ Despite the benefits to individual plaintiffs that result from settlement agreements—including a quicker and easier pay-day—sealed, out-of-court settlements and gag orders further increase the information gap between the public and oil and gas companies, thereby undermining public safety and making it more difficult to demonstrate that the industry has contaminated land and water.²⁴⁸ Evidence of contamination—including water and soil tests and medical reports—remains sealed, and private citizens remain in the dark about the potential drawbacks to fracking that the oil and gas companies do

²⁴¹ See 18 U.S.C. § 1839 (2012); WYO. STAT. ANN. § 16-4-203(d)(v) (West 2012); 20-3 WYO. CODE R. § 45(d) (LexisNexis 2012); Kercheval, *supra* note 98.

²⁴² See WYO. STAT. ANN. § 16-4-203(d)(v); 20-3 WYO. CODE R. § 45(d); *Powder River Basin Res. Council*, 2013 WL 8718518, at *5.

²⁴³ See LARSON ET AL., *supra* note 63, at 25.

²⁴⁴ *Powder River Basin Res. Council*, 2013 WL 8718518, at *3. In *Powder River Basin Resource Council v. Wyoming Oil and Gas Conservation Commission*, the court recognized the substantial merit in the environmental group and industry's arguments, yet held that the competing concerns were best addressed through legislative action. See *id.* at *9.

²⁴⁵ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 298; Coman, *supra* note 71, at 144–45; Efstathiou & Drajem, *supra* note 2.

²⁴⁶ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Efstathiou & Drajem, *supra* note 2.

²⁴⁷ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Hall, *supra* note 11, at 71, 73–74; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

²⁴⁸ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 300–01; Efstathiou & Drajem, *supra* note 2.

not tell them.²⁴⁹ Oil and gas companies in turn, have little to no regulatory or economic pressure to employ best practices or to ensure public safety while fracking.²⁵⁰

Judicial enforcement of gag orders in settlements further contributes to the information gap between oil and gas companies and the government and the public.²⁵¹ Gag orders ensure that property owners who might have valuable information about fracking, but who have settled, cannot share that information, such as presenting proof of injury.²⁵² The restrictions on the dissemination of valuable and important information through the use and enforcement of contractual gag orders thus makes it difficult for the government to adequately protect the public health, safety, and welfare, and in turn, prevents future fracking victims from holding oil and gas companies accountable for reasonably foreseeable harms.²⁵³

Due to the large gap in knowledge between what oil and gas companies tell private landowners about fracking and the realistic possibility that fracking is in fact a dangerous, environmentally damaging practice, it is very difficult for plaintiffs to prove causation in a tort suit.²⁵⁴ Without concrete knowledge of the chemicals used in the fracking process, which are protected as trade secrets,²⁵⁵ it is hard to prove that fracking caused a plaintiff's injuries because the symptoms cannot be matched with the chemicals used.²⁵⁶ Before *Parr v. Aruba Petroleum, Inc.*, many tort cases were dismissed because plaintiffs could not connect their health problems with fracking.²⁵⁷ Although plaintiffs could carry out extensive water and soil tests, doing so is an expensive process.²⁵⁸ Furthermore, as courts have discussed, the use of Lone Pine orders in fracking contamination cases creates a lack of public information that make it even more difficult to prove causa-

²⁴⁹ See Neil, *supra* note 205, at 20; Griswold, *supra* note 1, at SS1–46; Efstathiou & Drajem, *supra* note 2.

²⁵⁰ See *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2; *Burning Question: What Would Life Be Like Without the Halliburton Loophole?*, *supra* note 71.

²⁵¹ See Settlement Agreement and Release, *supra* note 174, at *7, *13–14; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2; Efstathiou & Drajem, *supra* note 2.

²⁵² See Amos, *supra* note 154; Efstathiou & Drajem, *supra* note 2.

²⁵³ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 300; Efstathiou & Drajem, *supra* note 2; *Pennsylvania Doctors Worry Over Fracking 'Gag Rule'*, *supra* note 97.

²⁵⁴ See Hall, *supra* note 11, at 71, 73–74; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

²⁵⁵ See *supra* notes 86–123 and accompany text.

²⁵⁶ See Hall, *supra* note 11, at 74.

²⁵⁷ See Atkin, *supra* note 148.

²⁵⁸ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Hall, *supra* note 11, at 76.

tion at the outset of the litigation.²⁵⁹ The information gap is even more damaging because many of the people who allow oil and gas companies to frack their land live at or near the poverty line, and requiring this discovery would be an enormous financial burden that many, if not most victims cannot bear.²⁶⁰ Although *Parr* may increase the amount of information available for plaintiffs to demonstrate causation, there is still significant secrecy in the industry.²⁶¹

Furthermore, the sealed settlements and gag orders imposed on victims of fracking make it difficult or impossible for those victims to share their stories.²⁶² A perfect example is Laura Amos' inability to testify before the Colorado Oil and Gas Conservation Commission, despite being subpoenaed to do so.²⁶³ Many believe that Amos had very valuable information that she wanted to share with the government and her neighbors, but the threat of a lawsuit was sufficiently powerful to prevent her from testifying.²⁶⁴

The lack of ability to share information, coupled with the lack of regulation, has made it very difficult for property owners to make informed decisions as to whether allowing oil and gas companies to frack their land is worth the risk of water contamination and negative health effects.²⁶⁵ The lack of information has led to a substantial lack of regulation and monitoring in an industry that should be closely regulated and monitored.²⁶⁶ Instead, oil and gas companies are allowed to control the message while the victims of fracking contamination are deprived of actionable information to combat industry claims.²⁶⁷ Using sunshine laws to shine light on the fracking industry is one possible solution to narrow the information gap, and to begin to tear down barriers that plaintiffs face in tort suits against the oil and gas industry.²⁶⁸

²⁵⁹ See *Strudley v. Antero Res. Corp.*, 2011 CV 2218, 2012 WL 1932470, at *2 (Colo. Dist. Ct. May 9, 2012), *rev'd*, No. 12CA1251, 2013 WL 3427901 (Colo. App. Ct. July 3, 2013), *cert. granted*, No. 13SC576, 2014 WL 1357327 (Colo. Apr. 7, 2014); Hall, *supra* note 11, at 74; Hall & Godshall, *supra* note 22, at 13.

²⁶⁰ See Hall, *supra* note 11, at 74; Griswold, *supra* note 1, at SS1–46.

²⁶¹ See Efstathiou & Drajem, *supra* note 2; Morris, *supra* note 146.

²⁶² See *Pressure Limits Efforts to Police Drilling for Gas*, *supra* note 61; Amos, *supra* note 154; Efstathiou & Drajem, *supra* note 2.

²⁶³ Efstathiou & Drajem, *supra* note 2; see Amos, *supra* note 154.

²⁶⁴ Efstathiou & Drajem, *supra* note 2.

²⁶⁵ See Griswold, *supra* note 1, at SS1–46, SS1–50; *Pressure Limits Efforts to Police Drilling for Gas*, *supra* note 61.

²⁶⁶ See 33 U.S.C. § 1342(l) (2012); 42 U.S.C. § 300h-4 (2012); *Pressure Limits Efforts to Police Drilling for Gas*, *supra* note 61.

²⁶⁷ See Hall, *supra* note 11, at 74; Efstathiou & Drajem, *supra* note 2.

²⁶⁸ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Hall, *supra* note 11, at 74.

VI. IMPLEMENTATION OF STATE SUNSHINE LAWS TO SHINE LIGHT ON THE FRACKING INDUSTRY

Despite the negative health effects associated with hydraulic fracturing (“fracking”) and the growing public concern over the industry, there are substantial hurdles to making the information about fracking fluid chemicals, as well as instances of water and soil contamination, public.²⁶⁹ Given the current national political climate, in which many politicians are pushing for energy independence, the influence of the oil and gas lobby, and the recent failure of several bills attempting to regulate the fracking industry, the future of federal fracking regulation and oversight looks bleak.²⁷⁰ Notwithstanding the enforceable secrecy of trade secrets and contractual gag orders however, using state sunshine laws to expose information about the chemical composition of fracking fluid and contaminants found in people’s water and air, is a possible way to provide victims with more effective recourse against oil and gas companies and the public with a more accurate picture of the effects of fracking.²⁷¹

Public knowledge about the dangers of fracking will never get better if the current legal status quo does not change.²⁷² Without state or federal laws to the contrary, oil and gas companies will maintain their right to contract around disclosure.²⁷³ States governments and courts continue to support and uphold the trade secret status of fracking fluid content and the sanctity of confidential settlements, in spite of potential harms to the public health and welfare.²⁷⁴ Although some states have attempted to require oil and gas companies to disclose information about chemicals and chemical compounds used in fracking, the attempts have been unsuccessful.²⁷⁵ Furthermore, set-

²⁶⁹ See 18 U.S.C. § 1839 (2012); *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2; Efstathiou & Drajem, *supra* note 2.

²⁷⁰ See Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005) (codified at 42 U.S.C. §§ 15801–16524 (2012)); Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, S. 1135, 113th Cong. (2013), available at <https://www.govtrack.us/congress/bills/113/s1135>, archived at <http://perma.cc/6T3P-GLWH>; LARSON ET AL., *supra* note 63, at vii; Davis, *supra* note 64, at 180.

²⁷¹ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Hall, *supra* note 11, at 74; Atkin, *supra* note 148.

²⁷² See generally *supra* notes 86–202 and accompanying text.

²⁷³ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93; Efstathiou & Drajem, *supra* note 2.

²⁷⁴ See *Powder River Basin Res. Council v. Wyo. Oil & Gas Conservation Comm’n*, No. 94650, 2013 WL 8718518, at *17 (Wyo. Dist. Ct. Mar. 21, 2013), *rev’d*, 320 P.3d 222 (Wyo. 2014); *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 293.

²⁷⁵ See TEX. NAT. RES. CODE ANN. § 91.851 (West 2011); WYO. STAT. ANN. § 16-4-203(d)(v) (West 2012); 20-3 WYO. CODE R. § 45(d) (LexisNexis 2012); *Powder River Basin Res. Council*, 2013 WL 8718518, at *17; Elgin et al., *supra* note 6; see generally notes 86–202 and accompanying text.

tlements allow plaintiffs to recover much needed damages without prohibitively costly litigation.²⁷⁶ In such cases, the victim's personal needs understandably become more important to them than increasing national exposure of the dangers of fracking.²⁷⁷

Despite the lack of federal regulation, states should consider enacting sunshine laws similar to those in Texas and Arkansas, to shine light on the fracking industry.²⁷⁸ Sunshine laws would make fracking settlements with oil and gas companies available to the public where it could be shown that the oil and gas company injured the plaintiff, and sealing the settlement would hide information regarding public health, safety, or welfare, from the public.²⁷⁹ Making these settlements available would allow the media greater access to the secrets of the industry, and could create much greater public pressure on state and federal regulators to address the problem.²⁸⁰ Furthermore, the enactment of state sunshine laws would chip away at the layers of secrecy that surround the fracking industry and provide a better picture of just how many people have been injured by fracking.²⁸¹ Finally, the increase in publically available information could allow more plaintiffs to successfully recover damages from oil and gas companies.²⁸²

Although sunshine laws will not likely prevent oil and gas companies from settling out of court, they have the potential to dramatically increase public access to the information contained in the settlements.²⁸³ The Texas law, for example creates a presumption of public access to court records, including unfiled settlement agreements and unfiled pretrial discovery that has a probable adverse effect upon the general public health or safety.²⁸⁴ Despite the fact that plaintiffs must prove that sealing unfiled settlements and pretrial discovery would have an adverse effect on the general public health, the prevalence of substantiated contamination through water test-

²⁷⁶ See *Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement*, *supra* note 156, at 292–93.

²⁷⁷ See *id.*; Griswold, *supra* note 1, at SS1–46.

²⁷⁸ See ARK. CODE ANN. § 16-55-122 (West 2010); TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800.

²⁷⁹ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76.

²⁸⁰ See *Hallowich v. Range Res. Corp.*, 30 Pa. D. & C.5th 91, 127 (Pa. C.P. 2013), *vacated*, 54 A.3d 13 (Pa. Super. Ct. 2012); see also *Powder River Basin Res. Council*, 2013 WL 8718518, at *9 (noting that the public interest in access to information will lead to a better understanding of the environmental and health problems associated with fracking).

²⁸¹ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

²⁸² See *Atkin*, *supra* note 148.

²⁸³ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76; *Efstathiou & Drajem*, *supra* note 2.

²⁸⁴ See TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 793, n.9.

ing,²⁸⁵ and expert testimony from doctors who have treated patients suffering from headaches, nosebleeds, migraines, and much worse,²⁸⁶ should make such proofs surmountable.²⁸⁷ The Texas law is also stronger than most sunshine laws because it creates a presumption of access to all court records, including unfiled settlements and discovery.²⁸⁸ A law that would shine light only on filed settlement agreements would have substantially less impact on the fracking industry, as most settlements are reached out of court.²⁸⁹ Thus, it is important that states follow the Texas model of presuming a public right of access to private, unfiled settlements.²⁹⁰

The Arkansas sunshine law also provides important lessons for states considering their own sunshine laws.²⁹¹ Because it calls into question the validity of the gag orders imposed on plaintiffs after settling with oil and gas companies,²⁹² the Arkansas law voids settlements that conceal environmental hazards.²⁹³ Furthermore, a law in Colorado equivalent to the Arkansas law might have protected Laura Amos from the threat of retributive litigation that prevented her from testifying in front of the Colorado Oil and Gas Conservation Commission.²⁹⁴

Even if these laws were enacted in states around the country, problems due secrecy in the fracking industry could persist.²⁹⁵ First, there is no guarantee that states will use the laws in the context of fracking suits.²⁹⁶ Neither Arkansas nor Texas has seen the use of its sunshine law to unseal fracking settlement agreements, despite the prevalence of fracking and private fracking settlements in both.²⁹⁷ Second, parties hoping for disclosure of chemi-

²⁸⁵ See Griswold, *supra* note 1, at SS1–49; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2. This would also be possible if all states required baseline testing before drilling. See Hall, *supra* note 11, at 74.

²⁸⁶ See Griswold, *supra* note 1, at SS1–49; Morris et al., *supra* note 3; *Pennsylvania Doctors Worry Over Fracking ‘Gag Rule,’* *supra* note 97;

²⁸⁷ See TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at n.9; Hall, *supra* note 11, at 74.

²⁸⁸ See TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at n.9.

²⁸⁹ See *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 795–96; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

²⁹⁰ See TEX. R. CIV. P. 76.

²⁹¹ See ARK. CODE ANN. § 16-55-122 (West 2010).

²⁹² See *id.*

²⁹³ *Id.*

²⁹⁴ See *id.*; Amos, *supra* note 154; Efstathiou & Drajem, *supra* note 2.

²⁹⁵ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76; *Settlement, Secrecy, and Judicial Discretion: South Carolina’s New Rules Governing the Sealing of Settlements*, *supra* note 159, at 799–800.

²⁹⁶ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76; Morris et al., *supra* note 3.

²⁹⁷ See ARK. CODE ANN. § 16-55-122 (West 2010); TEX. R. CIV. P. 76; Morris et al., *supra* note 3.

cals and settlement agreements must still demonstrate that there is a probable environmental harm.²⁹⁸ Because some studies have demonstrated that fracking can be safe when done correctly, and because the fracking industry is exempt from several federal regulations, this can be insurmountable in some cases.²⁹⁹ Finally, even if sunshine laws prove effective, there are many settlements that the media and the government do not know about, and thus cannot unseal.³⁰⁰

CONCLUSION

People in areas where fracking is a prevalent industry face a difficult choice when approached by oil and gas companies looking for the rights to frack their land. Oil and gas companies offer lucrative deals for landowners and insist that fracking is safe. The lack of federal regulation and monitoring makes it difficult for the government and media to collect accurate information and for landowners to make informed decisions when deciding whether to grant access to oil and gas companies. Furthermore, oil and gas companies use a combination of trade secret law and secret settlement agreements and gag orders to ensure that the industry remains shrouded in secrecy. This allows oil and gas industry executives to continue to claim that the industry has never caused harm. This secrecy undermines public health, safety, and welfare, and does not give the public a complete and accurate understanding of the dangers of fracking when approached by oil and gas companies. States should thus take steps to fill in the information gap. State sunshine laws pose a possible solution to the information gap between the public and oil and gas companies, and should allow for greater transparency of an enormous industry that is currently shrouded in secrecy and exempt from many crucial federal regulations. An increase in available information will give fracking victims more recourse in pursuing legal action against oil and gas companies and will allow landowners to make more informed decisions when granting land rights to these companies for fracking.

²⁹⁸ See ARK. CODE ANN. § 16-55-122; TEX. R. CIV. P. 76.

²⁹⁹ See 33 U.S.C. § 1342(l) (2012); 42 U.S.C. § 300h-4 (2012); 2004 REPORT, *supra* note 60, at 5.

³⁰⁰ See *Settlement, Secrecy, and Judicial Discretion: South Carolina's New Rules Governing the Sealing of Settlements*, *supra* note 159, at 800; *A Tainted Water Well, and Concerns There May Be More*, *supra* note 2.

